Phase End Project
Taxi Service Automation using TestNG,Jenkins,Docker,AWS

Step1:

Create a maven project and add the dependencies and write the test scripts with chromedriver.exe

Step2:

While running in parallel method the test cases were fast and due to some bugs somes of test cases run in the next run .

Step3:

Create a maven jenkins automation give the pom.xml file path and then maven clean and maven test , this creates a automated test in jenkins

Testng.class

package com.test;

import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;
import org.testng.annotations.AfterSuite;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;

public class AutomationofEcommerce {

        public WebDriver driver ;

```java
        public String baseurl="https://www.flipkart.com/";


  @Test
  public void Searchproducts() {
        //Waiting for the page to Load
        try {Thread.sleep(5000);} catch (InterruptedException e)
{e.printStackTrace(); }
        WebElement
closebtn=driver.findElement(By.xpath("/html/body/div[2]/div/div/button"));closebtn.c
lick();
        WebElement mobiles =
driver.findElement(By.linkText("Mobiles"));mobiles.click();
        WebElement searchbox = driver.findElement(By.name("q"));
        searchbox.sendKeys("IPhone 13");
        WebElement searchbutton =
driver.findElement(By.xpath("/html/body/div/div/div[1]/div[1]/div[2]/div[2]/form/div/
button"));
        searchbutton.click();
  }
  @Test
  public void performancetest() {
        long startTime = System.currentTimeMillis();
        try {Thread.sleep(5000);} catch (InterruptedException e)
{e.printStackTrace();}
        long pageLoadTime = System.currentTimeMillis() - startTime;
        System.out.println("Page load time: " + pageLoadTime + " milliseconds");
  }

  @Test
  public void loadtest() {
        try {Thread.sleep(5000);} catch (InterruptedException e)
{e.printStackTrace();}
        java.util.List<WebElement> images =
driver.findElements(By.tagName("img"));
        JavascriptExecutor js = (JavascriptExecutor) driver;
    long viewportHeight = (Long) js.executeScript("return window.innerHeight");
    for (WebElement image : images) {
```
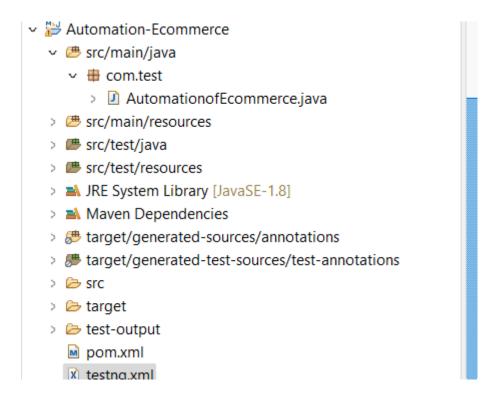
```java
        boolean isLoadedAndVisible = (Boolean) js.executeScript("var img =
arguments[0];" + "var rect = img.getBoundingClientRect();" +"return rect.top >= 0
&& rect.bottom <= arguments[1];",image, viewportHeight);
        if (isLoadedAndVisible) {
            System.out.println("Image is loaded and visible within the viewport height: "
+ image.getAttribute("src"));
        } else {
            System.out.println("Image is NOT loaded and visible within the viewport
height: " + image.getAttribute("src"));
        }
    }
}

@Test
public void scrolltest() {
        Actions scrollpage=new Actions(driver);

scrollpage.sendKeys(Keys.PAGE_DOWN).sendKeys(Keys.PAGE_DOWN).sendKey
s(Keys.PAGE_DOWN).pause(2000).sendKeys(Keys.PAGE_UP).sendKeys(Keys.PA
GE_UP).build().perform();
}


@Test
public void imageloadtest() {
        try {Thread.sleep(5000);} catch (InterruptedException e)
{e.printStackTrace();}
        WebElement imageElement = driver.findElement(By.tagName("img"));
    int imagePositionY = imageElement.getLocation().getY();
    JavascriptExecutor jsExecutor = (JavascriptExecutor) driver;
    jsExecutor.executeScript("window.scrollTo(0, arguments[0]);", imagePositionY);
    try {Thread.sleep(5000);} catch (InterruptedException e) {e.printStackTrace();}
    boolean isImageDisplayed = imageElement.isDisplayed();
    if (isImageDisplayed) {System.out.println("The image is downloaded and
displayed in time.");} else {
        System.out.println("The image is NOT downloaded and displayed in time.");
    }
}

@Test
```

```java
    public void verfiyscrolltest() {
            try {Thread.sleep(5000);} catch (InterruptedException e)
{e.printStackTrace();}
        JavascriptExecutor jsExecutor = (JavascriptExecutor) driver;
        jsExecutor.executeScript("window.scrollTo(0, document.body.scrollHeight);");
        try {Thread.sleep(2000);} catch (InterruptedException e) {e.printStackTrace();}

        long currentPosition = (Long) jsExecutor.executeScript("return window.scrollY;");
        long maxScrollHeight = (Long) jsExecutor.executeScript("return Math.max(
document.body.scrollHeight, document.body.offsetHeight,
document.documentElement.clientHeight, document.documentElement.scrollHeight,
document.documentElement.offsetHeight );");
        if (currentPosition == maxScrollHeight) {
          System.out.println("Navigated to the bottom of the page.");
        } else {
          System.out.println("Did NOT navigate to the bottom of the page.");
        }
    }


    @BeforeTest
    public void beforeTest() {System.out.println("Starting the test..");}

    @AfterTest
    public void afterTest() {System.out.println("Finished.");}

    @BeforeSuite
    public void beforeSuite() {

System.setProperty("webdriver.chrome.driver","C:\\Users\\Swaroop\\Desktop\\Eclipse
Workspace\\chromedriver.exe");
            driver = new ChromeDriver();
            driver.get(baseurl);
    }

    @AfterSuite
    public void afterSuite() {
            driver.quit();
    }
```

}

Testng.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">
<suite name="Suite">
<test thread-count="5" name="Test" parallel="methods">
<classes>
<class name="com.test.AutomationofEcommerce"/>
</classes>
</test> <!-- Test -->
</suite> <!-- Suite -->
```

```
∨ 🐦 Automation-Ecommerce
  ∨ 🎮 src/main/java
    ∨ ⊞ com.test
      > 🗎 AutomationofEcommerce.java
  > 🎮 src/main/resources
  > 🎮 src/test/java
  > 🎮 src/test/resources
  > 🔺 JRE System Library [JavaSE-1.8]
  > 🔺 Maven Dependencies
  > 🎮 target/generated-sources/annotations
  > 🎮 target/generated-test-sources/test-annotations
  > 📂 src
  > 📂 target
  > 📂 test-output
    🅼 pom.xml
    🗙 testng.xml
```

Search:		Passed: 5	Failed: 1	Skipped: 0		Tests: 1/1

All Tests | Failed Tests | Summary

```
∨ Suite ( 5/1/0/0 ) (36.86 s)                          Failure Exception
  ∨ Test ( 36.86 s )
    ∨ com.test.AutomationofEcommerce
        scrolltest  (2.092 s)
        performancetest  (5.023 s)
        Searchproducts  (5.102 s)
        loadtest  (7.435 s)
        verfiyscrolltest  (7.049 s)
        imageloadtest  (10.159 s)
```

Search: ☑ Passed: 5

All Tests | **Failed Tests** | Summary

- Suite (5/1/0/0) (64.794 s)
  - Test (64.794 s)
    - com.test.AutomationofEcommerce
      - Searchproducts (6.006 s)
      - imageloadtest (10.146 s)
      - loadtest (34.032 s)
      - performancetest (5.009 s)
      - scrolltest (2.533 s)
      - verfiyscrolltest (7.068 s)

(due to some selenium bugs the test cases some test cases pass in the next run)

<terminated> Automation-Ecommerce_testng.xml [TestNG] C:\Users\Swaroop\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230425-1502\jre\bin\javaw.exe (31-.

Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: https://rukminim2.flixcart.com/image/300/300/ktketu80/mobile/a/e/g/iph
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAw
Image is NOT loaded and visible within the viewport height: https://static-assets-web.flixcart.com/fk-p-linchpin-web/fk-cp-zion/im
Page load time: 5007 milliseconds
Finished.

===
Suite
Total tests run: 6, Passes: 5, Failures: 1, Skips: 0
===

1 suite, 1 failed test

☑ com.test.AutomationofEcommerce

Searchproducts

imageloadtest

loadtest

performancetest

scrolltest

Times for Suite

Total running time: 1 minutes

Number	Method	Class	Time (ms)
0	loadtest	com.test.AutomationofEcommerce	34,032
1	imageloadtest	com.test.AutomationofEcommerce	10,146
2	verfiyscrolltest	com.test.AutomationofEcommerce	7,068
3	Searchproducts	com.test.AutomationofEcommerce	6,006
4	performancetest	com.test.AutomationofEcommerce	5,009
5	scrolltest	com.test.AutomationofEcommerce	2,533

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Enter an item name

AutomationEcommerce

» Required field

Freestyle project

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with

Maven project

Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the

Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building

Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on

Folder

Creates a container that stores nested items in it. Useful for grouping things together. Unlike
as they are in different folders.

Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.

Organization Folder

Creates a set of multibranch project subfolders by scanning for repositories.

If create a new item from other existing, you can use this option:

OK

t

Pre Steps

Add pre-build step ▾

Build

Root POM ❓

C:\Users\Swaroop\Desktop\EclipseWorkspace\Automation-Ecommerce\pom.xml

Goals and options ❓

clean test

Advanced ⌄

Post Steps

Image is NOT loaded and visible within the viewport height: https://static-assets-web.flixcart.com/batman-returns/batman-returns/p/images/gift-cards-image-d7ff24.svg
Image is NOT loaded and visible within the viewport height: https://static-assets-web.flixcart.com/batman-returns/batman-returns/p/images/help-centre-image-c4ace8.svg
Image is NOT loaded and visible within the viewport height: https://static-assets-web.flixcart.com/batman-returns/batman-returns/p/images/payment-method-c454fb.svg
Image is loaded and visible within the viewport height:
  data:image/svg+xml;base64,PHN2ZyB3aWR0aD0iMTQiIGhlaWdodD0iMTQiIHZpZXdCb3g9IjAgMCAxNCAxNCIgZmlsbD0ibm9uZSIgeG1sbnM9Imh0dHA6Ly93d3cudzMub3JnLzIwMDAvc3ZnIj48cGF0aCBkPSIIiE0IDIuOIDEuNDNMTIuNTkgMEw3IDUuNDFMMUw1LjU5IDHTl1MMMM
  0MUw1LjU5IDdMMCAxMi41OUwxLjQxIDE0TDcgOC40OMUwxMi41OSAxNEwxNCAxMi41OUw4LjQxIDdMMTQgMS40MVoiCiAgICBmaWxsPSIjMTExMTEyIgovPjwvc3ZnPgo=
Image is loaded and visible within the viewport height:
  data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAwMC9zdmciIHdpZHRoPSIxOTIiIGhlaWdodD0iMTkyIiBmaWxsPSIjMDAwMDAwIiB2aWV3Qm94PSIwIDAgMjU2IDI1NiI+PHJlY3Qgd2lkdGg9IjI1NiIgaGVpZ2h0PSIzNTYiCg0PSIyNTYiIC
  iPjwvcmVjdD48cGF0aCBkPSJNMzIsMTA0SDgwYTAsMCwwLDAsMSwwLDBWMjA4YTAsMCwwLDAsMSwwLDBIMzJhOCw4LDAsMCwxLTgtOFYxMT3BOCw4LDAsMCwxLDMyLDEwNFoiCIGZpbGw9Im5vbmUiIHN0cm9rZT0iIzAwMDAwMCIgc3Ryb2tlLWxpbmVjYXA9InJvdW5k5kIiI
  ZWpvaW49InJvdW5kIiBzdHJva2Utd2lkdGg9IjE2Ij48L3BhdGg+PHBhdGggZD0iTTgwLDEwNGw0OMC04MGEzMiwzMiwwLDAsMSwzMiwzMlY4MGg2MS45YTE1LjksMTUuOSwwLDAsMSwxNS44NLDE4LDQuOXMiw5NmExNiwxNiwwLDAsMS0xNS44LDE0LDE0SDgwIiBmaWxsPSJub2
  iMwMDAwMDAiHN0cm9rZS1saW5lY2FwPSJyb3VuZCIgc3Ryb2tlLWxpbmVqb2luPSJyb3VuZCIgc3Ryb2tlLWxpbmVqb2luPSJyb3VuZCIgc3Ryb2tlLWxpbmVqb2luPSIyb3VuZCIgc3Ryb2tlLXdpZHRoPSIxNiI+PC9wYXRoPjwvc3ZnPgo=
Image is loaded and visible within the viewport height:
  data:image/svg+xml;base64,PHN2ZyB4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAwMC9zdmciIHdpZHRoPSIxOTIiIGhlaWdodD0iMTkyIiBmaWxsPSIjMDAwMDAwIiB2aWV3Qm94PSIwIDAgMjU2IDI1NiI+PHJlY3Qgd2lkdGg9IjI1NiIgaGVpZ2h0PSIzNTYiCg0PSIyNTYiIC
  iPjwvcmVjdD48cGF0aCBkPSJNMzIsNDhIODBhODDBhMCwwLDAsMCwxLDAsMFYxNTJhMCwwLDAsMCwxLDAsMEgzMmE4LDgsMCwwLDEtOC04VjU2YTgsOCwwLDAsMSw4LThaIiBmaWxsPSJub251IiBzdHJva2U9IiMwMDAwMDAiIHN0cm9rZS1saW5lY2FwPSJyb3VuZCIgc3Ryb2
  PSJyb3VuZCIgc3Ryb2tlLXdpZHRoPSIxNiI+PC9wYXRoPjxwYXRoIGQ9Ik04MCwxNTJsNDAsODBhMzIsMzIsMCwwLDAsMzItMzJWMTc2aDYxLjlhMTUuOSwxNS45LDAsMCwwLDE1LjgtMThsLTEyLTk2YTE2LDE2LDAsMCwwLTE1LjgtMTRIODAiIGZpbGw9Im5vbmUiIHN0
  DAwMCIgc3Ryb2tlLWxpbmVjYXA9InJvdW5kIiBzdHJva2UtbGluZWpvaW49InJvdW5kIiBzdHJva2UtbGluZWpvaW49InJvdW5kIiBzdHJva2Utd2lkdGg9IjE2Ij48L3BhdGg+PC9zdmc+Cg==

Page load time: 5009 milliseconds
Did NOT navigate to the bottom of the page.
Finished.
[ERROR] Tests run: 6, Failures: 1, Errors: 0, Skipped: 0, Time elapsed: 131.2 s <<< FAILURE! -- in TestSuite
[ERROR] com.test.AutomationofEcommerce.Searchproducts -- Time elapsed: 5.300 s <<< FAILURE!
org.openqa.selenium.NoSuchElementException:
no such element: Unable to locate element: {"method":"xpath","selector":"/html/body/div[2]/div/div/button"}
  (Session info: chrome=115.0.5790.110)
For documentation on this error, please visit: https://www.selenium.dev/documentation/webdriver/troubleshooting/errors#no-such-element-exception
Build info: version: '4.10.0', revision: 'c14d967899'
System info: os.name: 'Windows 11', os.arch: 'amd64', os.version: '10.0', java.version: '17.0.8'
Driver info: org.openqa.selenium.chrome.ChromeDriver
Command: [02f0902a0a4cc95845a22e3ff8b89911, findElement {using=xpath, value=/html/body/div[2]/div/div/button}]
Capabilities {acceptInsecureCerts: false, browserName: chrome, browserVersion: 115.0.5790.110, chrome: {chromedriverVersion: 114.0.5735.90 (386bc09e8f4f..., userDataDir: C:\WINDOWS\SystemTemp\scope...},
goog:chromeOptions: {debuggerAddress: localhost:59856}, networkConnectionEnabled: false, pageLoadStrategy: normal, platformName: windows, proxy: Proxy(), se:cdp: ws://localhost:59856/devtoo..., se:cdpVer:
115.0.5790.110, setWindowRect: true, strictFileInteractability: false, timeouts: {implicit: 0, pageLoad: 300000, script: 30000}, unhandledPromptBehavior: dismiss and notify, webauthn:extension:credBlob: 1
webauthn:extension:largeBlob: true, webauthn:extension:minPinLength: true, webauthn:extension:prf: true, webauthn:virtualAuthenticators: true}
Session ID: 02f0902a0a4cc95845a22e3ff8b89911
        at java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance0(Native Method)
        at java.base/jdk.internal.reflect.NativeConstructorAccessorImpl.newInstance(NativeConstructorAccessorImpl.java:77)
        at java.base/jdk.internal.reflect.DelegatingConstructorAccessorImpl.newInstance(DelegatingConstructorAccessorImpl.java:45)
        at java.base/java.lang.reflect.Constructor.newInstanceWithCaller(Constructor.java:499)

115.0.5790.110, setWindowRect: true, strictFileInteractability: false, timeouts: {implicit: 0, pageLoad: 300000, script: 30000}, unhandledPromptBehavior: dismiss and notify, webauthn:extension:credBlob: true,
webauthn:extension:largeBlob: true, webauthn:extension:minPinLength: true, webauthn:extension:prf: true, webauthn:virtualAuthenticators: true}
Session ID: 02f0902a0a4cc95845a22e3ff8b89911
[INFO]
[ERROR] Tests run: 6, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[ERROR] There are test failures.

Please refer to C:\Users\Swaroop\Desktop\EclipseWorkspace\Automation-Ecommerce\target\surefire-reports for the individual test results.
Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[JENKINS] Recording test results
[INFO] --
[INFO] BUILD SUCCESS
[INFO] --
[INFO] Total time: 03:40 min
[INFO] Finished at: 2023-07-31T21:53:35+05:30
[INFO] --
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving C:\Users\Swaroop\Desktop\EclipseWorkspace\Automation-Ecommerce\pom.xml to Automation-Ecommerce/Automation-Ecommerce/0.0.1-SNAPSHOT/Automation-Ecommerce-0.0.1-SNAPSHOT.pom
channel stopped
Finished: UNSTABLE